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FAUNISTIC NOTE

First record of *Iris oratoria* (Dictyoptera: Mantodea: Tarachodidae) in Romania

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Abstract

Iris oratoria is recorded for the first time in Alba, Vrancea and Călărași counties, Romania. The presence of the species in Romania is not unexpected, as it is also present in the neighbouring countries and its tendency of migrating north is well known.

Keywords

Iris oratoria, Mantodea, Romania.

The suborder Mantodea is represented by thermophilic, predatory insects. These are heterometabolous insects, with characteristic raptorial front legs adapted for catching prey.

Three species of mantids were previously known to occur in Romania: *Mantis religiosa* (Linnaeus, 1758), *Empusa fasciata* (Brullé, 1832) and *Ameles heldreichi* (Brunner von Wattenwyl, 1882).

The presence of *Iris oratoria* (Linnaeus, 1758) in Romania can be attributed to climate change or to international transportation, given the fact that the first sighting took place in a train station. Distribution of the species includes Albania, Bulgaria, France, Greece, Italy, Macedonia, Portugal, Spain, Serbia, Kosovo, Vojvodina, Montenegro, North Africa (Morocco, Algeria, Tunisia, Libya, Egypt, N Chad), Cyprus, West Asia (Asian Turkey, Israel, Lebanon, Syria, Jordan, Iran) (Kment 2010). In 1930, the species was introduced in south-western United States (California,

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Arizona) and spread north and east, where it survived and reproduced due to later emerging than the native *Stagmomantis limbata,* as well as its late-season persistence (Maxwell & Eitan 1998).

Iris oratoria is a xerothermic Mediterranean species. Males measure 28–41 mm in length, while females are a bit larger, measuring between 34–47 mm. Adults are usually green, rarely brown. The male wings surpass the apex of the abdomen, while in females, the wings are shorter, not reaching the tip of the abdomen. The vertex is without conical protuberances, the frontal sclerite has two small round tubercles (Fig. 1) and the fore femora with five external spines (Fig. 2) (Kment 2010). The species has a characteristic drawing on the second pair of wings. The hind wing has a central dark spot in the anal area, followed by other dispersed spots with metallic violet-blue iridescences. The discoidal area of the hind wing has a dispersed bright red colour, readily exposed in case of danger (Fig. 3). Males of *Iris oratoria* can be distinguished from males of *Mantis religiosa* by their diminished size, being smaller than 20 mm, and their lack of black and white spot on the interior of the coxae. Probably the most striking difference is the characteristic coloration pattern of the posterior wings in *Iris oratoria*, while in *M. religiosa* the wings are translucent and not pigmented.

The species' presence was recorded for the first time on 8 Aug. 2017, when two adult males were collected. The specimens were observed flying at night, attracted by artificial lights in Alba Iulia railway station. We continued to search for the species in four other counties: Sibiu, Mehedinți, Constanța and Vrancea, traveling by train and by car. On 13 Aug. 2017, another male was observed and collected on E85 National Road, in Mărășești, Vrancea. The insect was also found near an artificial

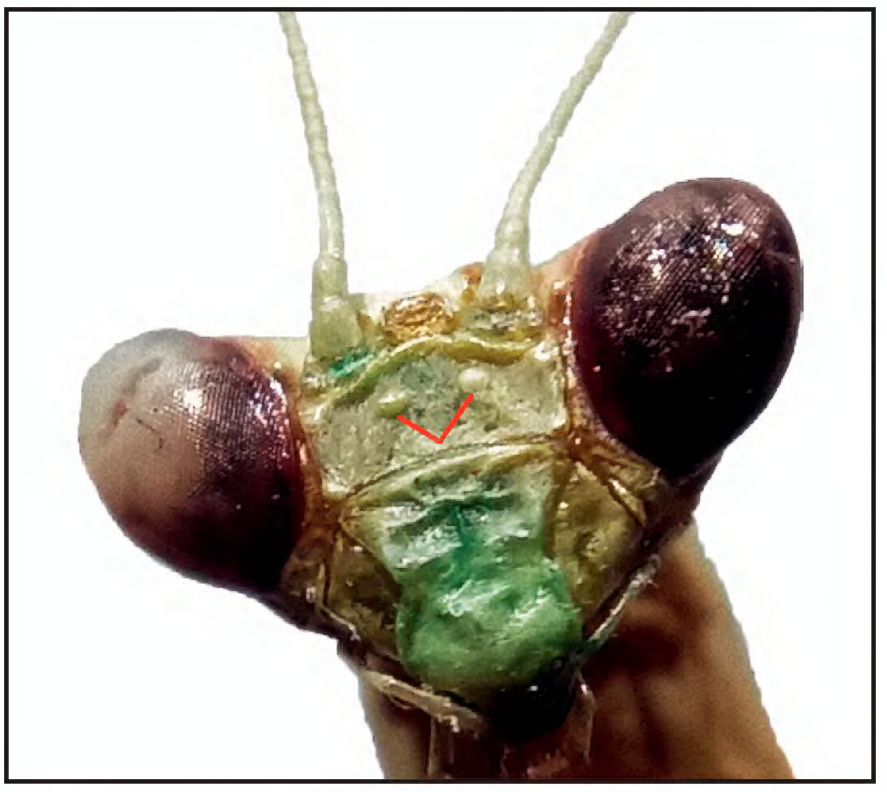

Figure 1. Round tubercles on the frontal sclerite.

Figure 2. The five external spines on the fore femora.

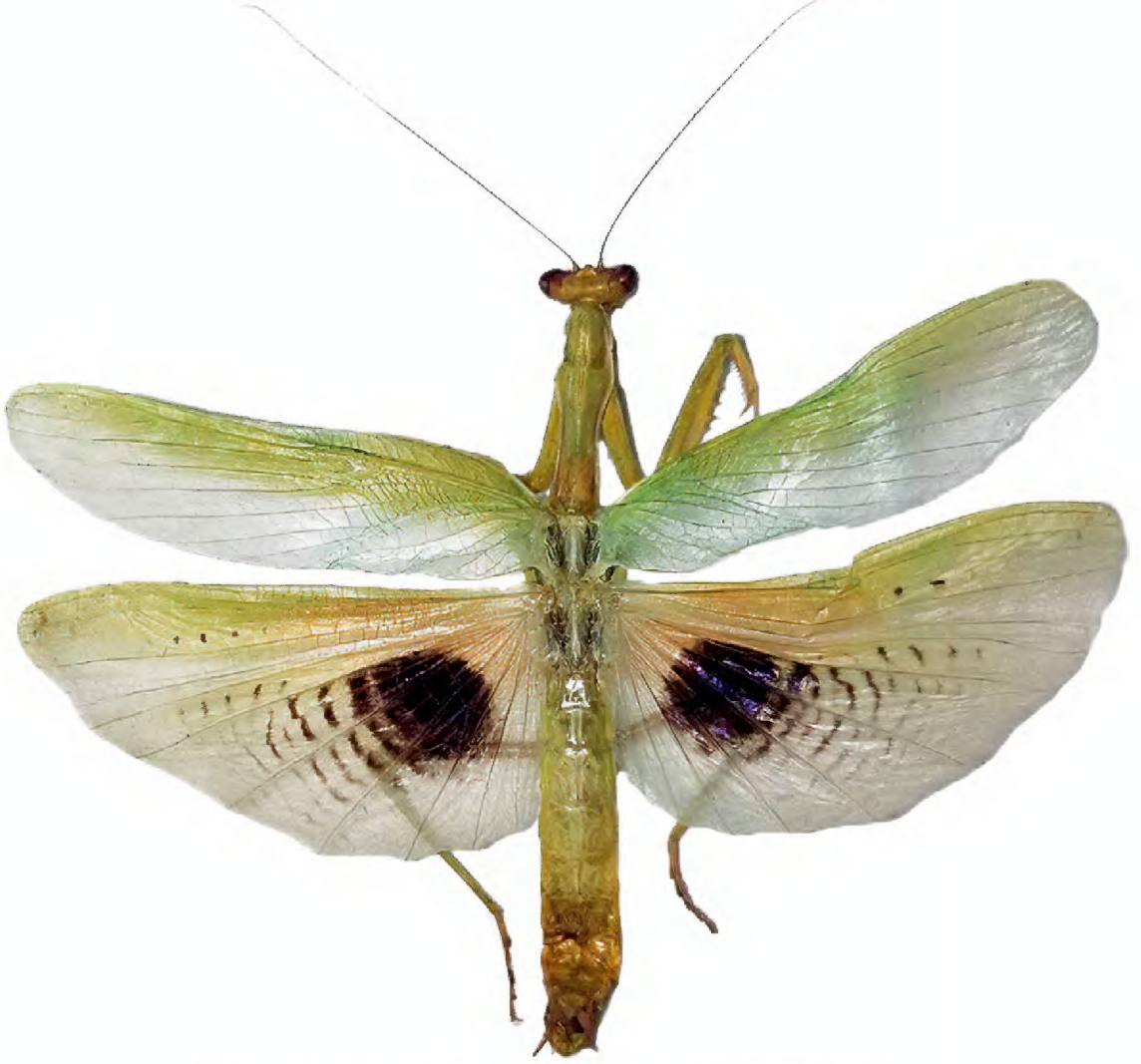

Figure 3. Coloration pattern on the hind wings.

light source. The third observation of the species comes from a photo taken by N. Dănescu in a field in Călărași county, on 16 Aug. 2017, but this specimen was not collected.

The studied material is as follows: 2 ♂♂, Romania, Alba county, Alba Iulia, 46.058010°N 23.579243° E, altitude 216 m asl, 2017.08.08, leg. A. Cazacu (one stored in A. Cazacu private collection, Suceava and one stored in "Grigore Antipa" National Museum of Natural History, Bucharest); 1 ♂, Romania, Vrancea county, Mărășești, 45.871609°N 27.210143° E, alt. 79 m asl, 2017.08.13, leg. A. Cazacu (stored in A. Cazacu private collection, Suceava); 1 ♂, Romania, Călărași county, Cuza Vodă, 44.272986°N 27.267077°E, altitude 37 m asl, 2017.08.16, obs. N. Dănescu.

Most likely, these specimens arrived on Romanian territory from one of the neighboring countries where the species is present, such as Serbia or Bulgaria. It is known that the species tends to migrate North (Maxwell & Eitan 1998) and the fact that the specimens were spotted in three different locations makes the presence of the species less likely random and it shows that it might be here to stay.

We plan to expand our search for the species in the other counties where it might be present, to confirm the presence of female individuals, nymphs and oothecae in order to see if the species is reproducing in Romania.

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